EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	1	("3963818").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/03 14:22
S2	0	(piston and ring and insert).ab. and salt and pressure and temperature	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/03 14:53
S3	2	(piston and ring and insert).ab. and salt and pressure	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/03 14:49
S4	29	("1759509" | "2473254" | "2685729" | "3991811" | "4026197" | "4083292" | "4120081" | "4494501" | "4586553" | "4658706" | "4662326" | "4776075" | "4833977" | "4890543" | "4971003" | "5425306" | "5505171" | "5660156").PN. OR ("5979298").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/03 14:50
S5	129	(piston and ring and insert).ab.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/03 16:22
S6	2246	method.ti. and (piston adj ring)	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/03 14:50
S7	367	method.ti. and (piston adj ring).ti.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/03 16:17
S8	116	S7 and (cast casting)	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/03 14:51
S9	75	(ring and insert).ab. and piston and (cast casting)	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/03 14:53
S10	33	(ring and insert).ab. and (piston adj ring) and (cast casting)	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/03 14:57
S11	42	S9 not S10	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/03 14:57
S12	4	(piston adj ring) and (ring adj insert).ab.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/03 16:17
S13	8	("2124360" | "2833668" | "4261088").PN. OR ("4488522").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/03 16:18
S14	504	(piston and ring and support).ab.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/03 16:22
S15	40	(piston adj ring adj support)	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/03 16:28
S16	46	(piston adj ring).ab. and salt	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/03 16:30
S17	28	S16 not (salt adj bath)	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/03 16:30
S18	49	(US-20060151573-$).did. or (US-4793374-$ or US-4938614-$ or US-4938452-$ or US-5219849-$ or US-5320238-$ or US-6161326-$ or US-6209345-$ or US-6294549-$ or US-6297258-$ or US-6333335-$ or US-6372245-$ or US-6462192-$ or US-4388806-$ or US-5377241-$ or US-5400499-$ or US-4447180-$ or US-4530506-$ or US-4793239-$ or US-5347554-$ or US-5375458-$ or US-5379330-$ or US-5394446-$ or US-5426680-$ or US-5465497-$ or US-5513229-$ or US-5524030-$).did. or (US-5839527-$ or US-5903974-$ or US-6019080-$ or US-6060892-$ or US-6152423-$ or US-4244627-$ or US-4268014-$ or US-4305348-$ or US-4312106-$ or US-4418711-$ or US-4587177-$ or US-4770133-$ or US-4773872-$ or US-4792322-$ or US-4863392-$ or US-4893878-$ or US-4913658-$ or US-4915010-$ or US-5402764-$ or US-5636531-$ or US-5651335-$ or US-5701800-$).did.	US-PGPUB; USPAT	OR	ON	2007/10/04 08:48
S19	11	("4083292" | "4408575" | "4651631").PN. OR ("4907545").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/04 09:25
S20	4	("4120081" | "4907545" | "5014658" | "6105540").PN. OR ("7003878").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/04 12:35
S21	56	("1073197" | "1157347" | "20040177503" | "20040177504" | "20040177505" | "20040194308" | "2108194" | "2282085" | "2720871" | "2806750" | "3070079" | "3314402" | "3413963" | "4011797" | "4067307" | "4120081" | "4180027" | "4206726" | "4368697" | "4470375" | "4493292" | "4502422" | "4581983" | "4587932" | "4662319" | "4776075" | "4907545" | "5014658" | "5771776" | "5947065" | "6105540").PN. OR ("5947065" | "6032619" | "6105540" | "7003878" | "7069881").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/04 09:28
S22	4	(method).ti. and (ring adj carrier and piston).ab.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/04 12:35
S23	4	(method).ti. and ((ring adj carrier) and piston).ab.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/04 12:37

S24	25	((ring adj carrier) and piston).ab.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/04 14:39
S25	21	S24 not S23	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/04 12:37
S26	2	(piston and ring and insert).ab. and salt and pressure	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/04 15:04
S27	29	("1759509" | "2473254" | "2685729" | "3991811" | "4026197" | "4083292" | "4120081" | "4494501" | "4586553" | "4658706" | "4662326" | "4776075" | "4833977" | "4890543" | "4971003" | "5425306" | "5505171" | "5660156").PN. OR ("5979298").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/04 15:04
S28	129	(piston and ring and insert).ab.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/04 15:04
S29	75	(ring and insert).ab. and piston and (cast casting)	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/04 15:04
S30	33	(ring and insert).ab. and (piston adj ring) and (cast casting)	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/04 15:04
S31	42	S29 not S30	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/04 15:04
S32	8	("2124360" | "2833668" | "4261088").PN. OR ("4488522").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/04 15:04
S33	46	(piston adj ring).ab. and salt	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/04 15:04
S34	28	S33 not (salt adj bath)	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/04 15:04
S35	49	(US-20060151573-$).did. or (US-4793374-$ or US-4938614-$ or US-4938452-$ or US-5219849-$ or US-5320238-$ or US-6161326-$ or US-6209345-$ or US-6294549-$ or US-6297258-$ or US-6333335-$ or US-6372245-$ or US-6462192-$ or US-4388806-$ or US-5377241-$ or US-5400499-$ or US-4447180-$ or US-4530506-$ or US-4793239-$ or US-5347554-$ or US-5375458-$ or US-5379330-$ or US-5394446-$ or US-5426680-$ or US-5465497-$ or US-5513229-$ or US-5524030-$).did. or (US-5839527-$ or US-5903974-$ or US-6019080-$ or US-6060892-$ or US-6152423-$ or US-4244627-$ or US-4268014-$ or US-4305348-$ or US-4312106-$ or US-4418711-$ or US-4587177-$ or US-4770133-$ or US-4773872-$ or US-4792322-$ or US-4863392-$ or US-4893878-$ or US-4913658-$ or US-4915010-$ or US-5402764-$ or US-5636531-$ or US-5651335-$ or US-5701800-$).did.	US-PGPUB; USPAT	OR	ON	2007/10/04 15:04
S36	11	("4083292" | "4408575" | "4651631").PN. OR ("4907545").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/04 15:04
S37	4	("4120081" | "4907545" | "5014658" | "6105540").PN. OR ("7003878").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/04 15:04
S38	56	("1073197" | "1157347" | "20040177503" | "20040177504" | "20040177505" | "20040194308" | "2108194" | "2282085" | "2720871" | "2806750" | "3070079" | "3314402" | "3413963" | "4011797" | "4067307" | "4120081" | "4180027" | "4206726" | "4368697" | "4470375" | "4493292" | "4502422" | "4581983" | "4587932" | "4662319" | "4776075" | "4907545" | "5014658" | "5771776" | "5947065" | "6105540").PN. OR ("5947065" | "6032619" | "6105540" | "7003878" | "7069881").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/04 15:04
S39	320	S30 S31 S28 S27 S26 S29 S32 S34 S35 S36 S38 S37	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/04 15:04
S40	368	("0858433" | "0892795" | "1073197" | "1157347" | "1208744" | "1296591" | "1309917" | "1390193" | "1476309" | "1553009" | "1715368" | "1759509" | "1866907" | "1946081" | "20040177503" | "20040177504" | "20040177505" | "20040194308" | "2040293" | "2108194" | "2124360" | "2164198" | "2199625" | "2282085" | "2294519" | "2297460" | "2349919" | "2376017" | "2380654" | "2390228" | "2390229" | "2473254" | "2550879" | "2647847" | "2685729" | "2687931" | "2696038" | "2720871" | "2752668" | "2753858" | "2753859" | "2786697" | "2806750" | "2833668" | "2851318" | "2865348" | "2876987" | "2882190" | "2893083" | "2905512" | "2959161" | "3064112" | "3070079" | "3075817" | "3092133" | "3098662" | "3104594" | "3133341" | "3190273" | "3251349" | "3314402" | "3354793" | "3356129" | "3369465" | "3380139" | "3413963" | "3421198" | "3471914" | "3508531" | "3555972" | "3567528" | "3596571" | "3615099" | "3616729" | "3628511" | "3671047" | "3686972" | "3709107" | "3729790" | "3744941" | "3751047" | "3770286" | "3790352" | "3811875" | "3853099" | "3861239" | "3865581" | "3875905" | "3882842" | "3886805" | "3891477" | "3914574" | "3943908" | "3945423" | "3991811" | "4011797" | "4026197" | "4057661" | "4067307" | "4073196" | "4083292" | "4120081" | "4152955" | "4174684" | "4179313" | "4180027" | "4206726" | "4211190" | "4223568" | "4261088" | "4334507" | "4361181" | "4368697" | "4408575" | "4470375" | "4485768" | "4488522" | "4493292" | "4494501" | "4498219" | "4502422" | "4506632" | "4517931").PN. OR ("4535730" | "4548126" | "4576060" | "4581983" | "4586553" | "4587932" | "4651631" | "4658706" | "4662319" | "4662326" | "4776075" | "4833977" | "4848170" | "4890543" | "4891875" | "4905751" | "4907545" | "4971003" | "5014658" | "5060603" | "5067456" | "5158047" | "5322109" | "5322425" | "5425306" | "5461776" | "5476076" | "5490445" | "5505171" | "5511521" | "5560334" | "5660156" | "5721056" | "5743012" | "5771776" | "5779818" | "5890465" | "5927236" | "5947065" | "6105540" | "6289857" | "6453869" | "6526935" | "6732683" | "6976467" | "Re33767").PN. OR ("1329271" | "2006/0151573" | "2390417" | "2833668" | "3053545" | "3963818" | "4008051" | "4120081" | "4137887" | "4305348" | "4336077" | "4488522" | "4547336" | "4575595" | "4651631" | "4829883" | "4907545" | "5014658" | "5660156" | "5901772" | "5947065" | "5979298" | "6032619" | "6105540" | "6199274" | "6199868" | "6837298" | "7003878" | "7069881" | "7077077" | "7185557" | "RE29899").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/04 15:05
S41	273	S40 not S39	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/04 15:05

S42	32	(US-20060151573-$).did. or (US-4336077-$ or US-1329271-$ or US-4907545-$ or US-5660156-$ or US-3053545-$ or US-4488522-$ or US-5947065-$ or US-6032619-$ or US-7003878-$ or US-7185557-$ or US-4305348-$ or US-2390417-$ or US-4651631-$ or US-7077077-$ or US-6199274-$ or US-3963818-$ or US-5979298-$ or US-4547336-$ or US-6105540-$ or US-RE29899-$ or US-7069881-$ or US-6199868-$ or US-5014658-$ or US-4120081-$ or US-6837298-$ or US-5901772-$).did. or (US-4829883-$ or US-4577595-$ or US-4137887-$ or US-4008051-$).did. or (US-2833668-$).did.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/04 15:06
S43	272	S41 not S42	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/04 15:20
S44	161	S43 and ring	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/04 15:06
S45	1	"20060151573".pn.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/04 15:20
S46	1	"6837298".pn.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/04 15:20
S47	1	"5301599".pn.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/04 15:20
S48	15	("2550879" | "2905512" | "3539192" | "4997024" | "5094149").PN. OR ("5301599").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/04 15:45
S49	1	"6189766".pn.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/04 15:47
S50	678	(29/888.047 29/888.074 29/888.049 29/888.07 29/888.072).ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/04 16:53
S51	122	S50 and pressure and (heat$2 (pre-heat2) temperature)	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/04 15:55
S52	1	"7163594".pn.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/04 15:55
S53	0	S50 and n/mm	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/04 16:53
S54	1	S50 and n/mm$1	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/04 17:03
S55	556	S50 not S51	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/05 08:42
S56	678	(29/888.047 29/888.074 29/888.049 29/888.07 29/888.072).ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/05 08:43
S57	122	S56 and pressure and (heat$2 (pre-heat2) temperature)	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/05 08:43
S58	556	S56 not S57	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/05 08:43
S60	377	S58 and ring	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/05 12:07
S61	6	S60 and salt	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/05 08:44
S62	11	("2685729" | "3264717" | "3413897" | "4559685" | "4776075" | "4891875").PN. OR ("5737838").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/05 08:46
S63	25	("3459253" | "4491168").PN. OR ("3413897" | "4776075").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/05 09:14
S64	17	("3459253" | "4491168").PN. OR ("4776075").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/05 09:41
S65	4312	(123/41 123/41.35 123/193.2 123/193.4 123/193.6 92/165R 92/166 164/132).ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/05 09:41
S66	877	S65 and (piston adj ring)	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/05 11:27
S67	214	S66 and (pressure and temperature and (cast casting))	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/05 10:32

EAST Search History

S68	56	S66 and (ring adj (insert support carrier))	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/05 11:05
S69	192	S67 not S68	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/05 11:05
S70	4960	S65 S56	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/05 11:05
S71	10	S70 and pressure and ((pressed press) near (core groove hole))	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/05 11:09
S72	13	S70 and pressure and ((pressed compress press) near (core groove hole))	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/05 11:09
S73	663	S66 not S67	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/05 11:27
S74	8	("4907545").URPN.	USPAT	OR	ON	2007/10/05 11:57
S75	28	ducati.as.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/05 15:23
S76	2	("4461343" "4505419").pn.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/05 15:23
S77	18	(piston adj ring adj carrier)	EPO; JPO	OR	ON	2007/10/05 15:56
S78	10	("3356129").PN. OR ("3963818").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/05 17:49
S79	247	(92/227 92/228).ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2007/10/05 17:49
S80	54	(US-20070022980-$ or US-20060151573-$ or US-20060191508-$ or US-20020040700-$).did. or (US-7013948-$ or US-5979298-$ or US-4829883-$ or US-5094149-$ or US-4547336-$ or US-4137887-$ or US-4120081-$ or US-4488522-$ or US-4336077-$ or US-RE29899-$ or US-4008051-$ or US-6199274-$ or US-7077077-$ or US-5301599-$ or US-2390417-$ or US-3053545-$ or US-1329271-$ or US-7213562-$ or US-4776075-$ or US-3963818-$ or US-5660156-$ or US-6199868-$ or US-4907545-$ or US-4651631-$ or US-4305348-$ or US-6105540-$).did. or (US-6032619-$ or US-7069881-$ or US-5014658-$ or US-6837298-$ or US-7003878-$ or US-5947065-$ or US-5901772-$ or US-5119777-$ or US-4577595-$ or US-4997024-$ or US-4891875-$ or US-4334507-$ or US-6546626-$ or US-5737838-$ or US-5357920-$ or US-5052280-$ or US-3659569-$).did. or (US-3380139-$ or US-3475804-$ or US-3413897-$ or US-2833668-$ or US-1946081-$ or US-3349672-$).did. or (EP-1052435-$).did.	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2007/10/09 09:26
S81	6	S80 and gray	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2007/10/09 09:26